

APRIL/MAY 2024

**23PMB12 — IMMUNOLOGY, IMMUNOMICS  
AND MICROBIAL GENETICS**

Time : Three hours

Maximum : 75 marks

**SECTION A — (10 × 2 = 20 marks)**

Answer ALL the questions.

1. Define about our Immune system.
2. Elaborate APC.
3. Explain cell mediated cytotoxicity.
4. Recall the Immunoglobulins.
5. Give the function of Counter current electrophoresis.
6. Illustrate the Reverse vaccinology.
7. Interpret Centromere.
8. Summarize Nucleosome.
9. Simplify the Conjugation.
10. What are  $\lambda$  phages?





SECTION B — (5 × 5 = 25 marks)

Answer ALL the questions.

11. (a) Analyse the origin, development and differentiation of T-lymphocytes.  
Or  
(b) Organize about the Acquired immunity.
12. (a) Construct the classical pathway of complement system.  
Or  
(b) Show about the DTH response in humans.
13. (a) Discuss about the tumor immunity.  
Or  
(b) Distinguish the types of vaccines.
14. (a) Identify structure of Chromatin.  
Or  
(b) Assume the process of Phosphorylation.
15. (a) Justify the natural competence of bacteria.  
Or  
(b) Explain the model of transposition mechanism.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Extend information of MHC genes and about the production.
17. Compile the theory of antibody production.
18. Estimate about the hypersensitivity types and its mechanisms.
19. Determine the eukaryotic genome's structure and properties.
20. Recommend the theory of generalized transduction.

